NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION



State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

Industrial Code:	3241	SPDES Number:	NY 000 5037
Discharge Class (CL):	03	DEC Number:	4-0124-00001/00057
Toxic Class (TX):	T	Effective Date (EDP):	October 1, 2010
Major Drainage Basin:	13	Expiration Date (ExDP):	September 30, 2015
Sub Drainage Basin:	01	Modification Dates:(EDPM)	July 19, 2011
Water Index Number:	H-214-1		May 1, 2012
Compact Area:			November 1, 2012

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. §1251 et.seq., hereinafter referred to as "the Act").

PERMITTEE NAME AND ADDRESS

Name: Lafarge Building Materials, Inc. Attention: Environmental Manager

Street: P.O. Box 3

City: Ravena State: NY Zip Code: 12143

is authorized to discharge from the facility described below:

FACILITY NAME AND ADDRESS

Name: Lafarge Building Materials, Inc.

Location (C,T,V): Coeymans (T) County: Albany

Facility Address: Route 9W

City: Ravena State: NY Zip Code: 12143

NYTM -E: NYTM - N:

From Outfall No.: 023 at Latitude: 42 ° 29 ' 27 '' & Longitude: 73 ° 47 ' 10 '

into receiving waters known as: Hudson River Class: C

and; (list other Outfalls, Receiving Waters & Water Classifications)

(See next page)

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1.2(a) and 750-2.

DISCHARGE MONITORING REPORT (DMR) MAILING ADDRESS

Mailing Name: Lafarge North America

Street: P.O. Box 3

City: Ravena State: NY Zip Code: 12143 Responsible Official or Agent: Environmental Manager Phone: (518) 756-5026

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed, or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:

CO BWP - Permit Coordinator
Regional Water Engineer
Regional Permit Administrator
EPA Region II - Michelle Josilo

Permit Administrator:			
Address:			
Signature:	Date:	/	/

ADDITIONAL OUTFALLS

Outfall No.	Description	Latitude/Longitude	Receiving Water/Class
003	Non-contact cooling water (NCCW), storm water	42° 29′ 47″ / 73° 48′ 23"	Coeymans Creek/C(TS)
006	Storm water	42° 29′ 37″ / 73° 49′ 02"	Unnamed Tributary 1 to Coeymans Creek/C
007	Storm water – Clay mining area, CKD landfill leachate.	42° 30′ 17″ / 73° 48′ 32″	Coeymans Creek/C(TS)
008	Becraft Pond Dewatering	42° 29′ 37″ / 73° 50′ 05	Unnamed Sub Trib. to Hannacroix Creek/D
010	Pre-modernization: Quarry pumpout water and storm water. Post-modernization: Storm water.	42° 29′ 28″ / 73° 49′ 26″	Tributary 1 to Coeymans Creek/C
012	Storm water	42° 29′ 24″ / 73° 47′ 14″	Hudson River/C
013	Storm water	42° 29′ 24″ / 73° 47′ 18″	Hudson River/C
014	Storm water	42° 29′ 32″ / 73° 48′ 04″	Coeymans Creek/C(TS)
015	Storm water	42° 29′ 38″ / 73° 48′ 10″	Coeymans Creek/C(TS)
016	Storm water	42° 29′ 33″ / 73° 48′ 06″	Coeymans Creek/C(TS)
017	Storm water	42° 29′ 29″ / 73° 48′ 47″	Unnamed Trib 1 to Coeymans Creek
018	Storm water	42° 29′ 28″ / 73° 48′ 49″	Unnamed Constructed Trib to Coeymans Creek
019	Storm water	42° 29′ 30″ / 73° 48′ 03″	Coeymans Creek/C(TS)
020	Quarry water	42° 29′ 31″ / 73° 48′ 59″	Unnamed Tributary 1 to Coeymans Creek/C
021	Storm water	42° 29′ 33″ / 73° 48′ 53″	Unnamed Tributary 1 to Coeymans Creek/C
23A	Treated Sanitary wastewater (formerly known as outfall 03A and 022)	Internal Outfall	Tributary to Outfall 003 prior to completion of CKD leachate treatment facility. Completion of new CKD leachate treatment system ,the receiving water is Hudson River/C after it mixes with Outfall 23B.
23B	CKD leachate prior to mixing with Outfall 23A	Internal Outfall	Mixes with Outfall 23A and discharges to Hudson River / C
023	CKD leachate (formerly known as outfall 03B) and treated sanitary wastewater	42° 29′ 27″ / 73° 47′ 10″	Tributary to outfall 003 prior to new CKD leachate treatment system. Completion of new CKD leachate treatment system, it is discharged to Hudson River/C
024	Storm water	42° 29′ 35″ / 73° 48′ 47″	Unnamed Tributary 1 to Coeymans Creek/C
025	Storm water	42° 29′ 45″ / 73° 48′ 38″	Unnamed Tributary 1 to Coeymans Creek/C
25A	Non-Contact Cooling Water	42° 29′ 50″ / 73° 48′ 41″	Unnamed Trib. to Coeymans Creek / C
027	Storm water	42° 28′ 45″ / 73° 49′ 43	Unnamed trib. of trib. 2 of Hannacroix Creek/C

Outfalls 021, 024, 025 become active in July 2016 or when Plant Modernization is complete, whichever is earlier.

NOTE: Decommissioning of any outfall that involve equipment must be in accordance with 6 NYCRR Part 750-2.11.

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OUTFALL	V	WASTEWATER TYPE R		RECEIVING WATER		EFFECTIVE			PIRING
	for discharg	escribes the type of wastewater authorized. Examples include process or san a storm water, non-contact cooling w	itary	This cell lists classified waters of the state to which the listed outfall discharges		starts i	nte this page in effect. (e.g. or EDPM)	is no	date this page o longer in ct. (e.g. ExDP)
PARAMETE	R	MINIMUM	MAXIMUM		UN	IITS	SAMPLE FR	EQ.	SAMPLE TYPE
e.g. pH, TRC Temperature,		The minimum level that must be maintained at all instants in time.	The maximum level that may not be exceeded at any instant in time.			i			

PARA- METER	EFFLUENT LIMIT	PRACTICAL QUANTITATION LIMIT (ML)	ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE
	Limit types are defined below in Note 1. The effluent limit is developed based on the more stringent of technology-based standards, required under the Clean Water Act, or New York State water quality standards. The limit has been derived based on existing assumptions and rules. These assumptions include receiving water hardness, pH and temperature; rates of this and other discharges to the receiving stream; etc. If assumptions or rules change the limit may, after due process and modification of this permit, change.	For the purposes of compliance assessment, the analytical method specified in the permit shall be used to monitor the amount of the pollutant in the outfall to this level, provided that the laboratory analyst has complied with the specified quality assurance/quality control procedures in the relevant method. Monitoring results that are lower than this level must be reported, but shall not be used to determine compliance with the calculated limit. This ML can be neither lowered nor raised without a modification of this permit.	Action Levels are monitoring requirements, as defined below in Note 2, that trigger additional monitoring and permit review when exceeded.	I	Examples include Daily, 3/week, weekly, 2/month, monthly, quarterly, 2/yr and yearly.	Examples include grab, 24 hour composite and 3 grab samples collected over a 6 hour period.

Note 1: DAILY DISCHARGE: The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day. DAILY MAX: The highest allowable daily discharge. DAILY MIN: The lowest allowable daily discharge. MONTHLY AVG (daily avg): The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. RANGE: The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown. 7 DAY ARITHMETIC MEAN (7 day average): The highest allowable average of daily discharges over a calendar week. 12 MRA (twelve month rolling avg): The average of the most recent twelve month's monthly averages. 30 DAY GEOMETRIC MEAN (30 d geo mean): The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of: the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month. 7 DAY GEOMETRIC MEAN (7 d geo mean): The highest allowable geometric mean of daily discharges over a calendar week.

Note 2: ACTION LEVELS: Routine Action Level monitoring results, if not provided for on the Discharge Monitoring Report (DMR) form, shall be appended to the DMR for the period during which the sampling was conducted. If the additional monitoring requirement is triggered as noted below, the permittee shall undertake a short-term, high-intensity monitoring program for the parameter(s). Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive operating and discharging days and analyzed. Results shall be expressed in terms of both concentration and mass, and shall be submitted no later than the end of the third month following the month when the additional monitoring requirement was triggered. Results may be appended to the DMR or transmitted under separate cover to the same address. If levels higher than the Action Levels are confirmed, the permit may be reopened by the Department for consideration of revised Action Levels or effluent limits. The permittee is not authorized to discharge any of the listed parameters at levels which may cause or contribute to a violation of water quality standards. The additional monitoring requirement is triggered upon receipt by the permittee of any monitoring results in excess of the stated Action Level.

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
003	Non-contact cooling water (NCCW), storm water	Coeymans Creek	EDPM	ExDP

PARAMETER *	EFFLUENT INSTANTANEOU S MINIMUM			UNIT S	SAMPLE FREQUENCY		NCY	SAMPLE TYPE	FOOTNO (FN)	TES
рН	6.0	9.0		SU	2/We	ek		Grab		
Temperature (T) – Effluent		Monitor		° F	Conti	nuou	IS	Recorder		
Temperature (T) - Upstream (U) of Outfall in Stream		Monitor		° F	Continuous		ıs	Recorder		
Temperature (T) – Downstream (D) of Outfall in Stream		Monitor ° F		Continuous		ıs	Recorder			
$\Delta T = U \text{ minus D:}$ June 1 – September 30		±2.0 ° F		Continuous		IS	Recorder			
$\Delta T = D \text{ minus U: October}$ 1 – May 31		5.0		° F	Continuous		Recorder			
ΔT = Outfall temp. minus U		Monitor		° F	Continuous Recorder		Recorder			
PARAMETER		EFFLUENT LIMIT			ACTION UNI LEVEL S			SAMPLE FREQUENC	SAMPL E	FN
		Monthly Average		aily imum				Y	TYPE	
Flow		Monitor	Moni	tor			MGD	Daily	Instantan eous	
Solids, Total Suspended		Monitor	50				mg/l	2/Week	Grab	
Solids, Settleable		Monitor	0.1				ml/l	2/Week	Grab	
Solids, Total Dissolved		Monitor	Moni	tor			mg/l	2/Week	Grab	
Oil & Grease		Monitor	15				mg/l	2/Week	Grab	
Mercury, Total		Monitor	50				ng/l	Quarterly	Grab	2

^{*} $\Delta T = Temperature Differential$

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
	Storm Water Runoff and Storm Water from Pond south of Main Entrance	Unnamed Trib 1 to Coeymans Creek	11/01/2012	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
рН	6.0	9.0	SU	Quarterly	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL					SAMPLE	SAMPLE	FN
	Monthly Average	Daily Maximum	ACTION LEVEL		UNITS	FREQUENCY	TYPE	
Flow	Monitor	Monitor			GPD	Quarterly	Instantaneous	4
Solids, Total Suspended	25	45			mg/l	Quarterly	Grab	
Solids, Settleable	Monitor	0.1			ml/l	Quarterly	Grab	
Solids, Total Dissolved	Monitor	Monitor			mg/l	Quarterly	Grab	4
Oil & Grease	Monitor	15			mg/l	Quarterly	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
007	Storm Water from Former Clay Mining Area and CKD Management	Coeymans Creek	11/01/2012	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pН	6.0	9.0	SU	Monthly	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION I EVEL		UNITS		SAMPLE	EN
	Monthly Average	Daily Maximum	ACTION LEVEL UNIT		UNITS SAMPLE FREQUENCY		SAMPLE TYPE	FN
Flow	Monitor	Monitor			GPD	Monthly	Instantaneous	4
Solids, Total Suspended	25	45			mg/l	Monthly	Grab	
Solids, Settleable	Monitor	0.1			ml/l	Monthly	Grab	
Solids, Total Dissolved	Monitor	Monitor			mg/l	Monthly	Grab	4
Oil & Grease	Monitor	15			mg/l	Monthly	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
008	Becraft Pond Dewatering	Unnamed Sub-Trib. to Hannacroix Creek	10/01/2010	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
рН	6.0	9.0	SU	Per Discharge	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL		UNITS	GANGE E	SAMPLE	
	Monthly Average	Daily Maximum	ACTION LEVEL		UNITS	SAMPLE FREQUENCY	TYPE	FN
Flow	Monitor	Monitor			GPD	Per Discharge	Instantaneous	
Solids, Total Suspended	25	45			mg/l	Per Discharge	Grab	
Solids, Settleable	Monitor	0.1			ml/l	Per Discharge	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
010	Pre-modernization: Quarry Pumpout Water and Storm Water. Post-modernization: Storm Water.	Unnamed Trib 1 to Coeymans Creek	11/01/2012	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pН	6.0	9.0	SU	Quarterly	Grab	

PARAMETER		EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL			SAMDI E	
	Monthly Average	Daily Maximum	ACTION	ACTION LEVEL U		SAMPLE FREQUENCY	SAMPLE TYPE	FN
Flow	Monitor	Monitor			MGD	Quarterly	Instantaneous	
Solids, Total Suspended	25	45			mg/l	Quarterly	Grab	
Solids, Total Suspended	Monitor	50			mg/l	Quarterly	Grab	3
Solids, Settleable	Monitor	0.1			ml/l	Quarterly	Grab	
Oil & Grease	Monitor	15			mg/l	Quarterly	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
012, 013	Storm Water – Near Gypsum Pile	Hudson River	10/01/2010	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
рН	6.0	9.0	SU	Quarterly	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL			a 11 m =		
	Monthly Average	Daily Maximum	ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
Flow	Monitor	Monitor			GPD	Quarterly	Estimated	
Solids, Total Suspended	Monitor	50			mg/l	Quarterly	Grab	
Solids, Settleable	Monitor	0.1			ml/l	Quarterly	Grab	
Sulfite, Total	Monitor	Monitor			mg/l	Quarterly	Grab	
Sulfate, Total	Monitor	Monitor			mg/l	Quarterly	Grab	
Oil & Grease	Monitor	15			mg/l	Quarterly	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
014, 015, 016, 019	Storm Water – Roadside Drainage Near and Under Conveyor Belt	Coeymans Creek	10/01/2010	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pН	6.0	9.0	SU	Quarterly	Grab	

PARAMETER	EFFLUENT LIMIT or CALCULATED LEVEL		ACTION LEVEL		UNITS	SAMPLE	SAMPLE	FN
	Monthly Average	Daily Maximum				FREQUENCY	TYPE	
Solids, Total Suspended	Monitor	50			mg/l	Quarterly	Grab	
Solids, Settleable	Monitor	0.1			ml/l	Quarterly	Grab	
Oil & Grease	Monitor	15			mg/l	Quarterly	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
017, 018	Storm Water – Along Main Road	Unnamed Trib 1 to Coeymans Creek - 017 and Unnamed Constructed Trib (Restoration) - 018	10/01/2010	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
рН	6.0	9.0	SU	Quarterly	Grab	

PARAMETER	PARAMETER EFFLUENT LIMIT or CALCULATED LEVEL Monthly Daily Maximum ACTION LEVEL		ACTION LEVEL		UNITS	a 11 m =	a	
			LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN	
Solids, Total Suspended	Monitor	50			mg/l	Quarterly	Grab	
Solids, Settleable	Monitor	0.1			ml/l	Quarterly	Grab	
Oil & Grease	Monitor	15			mg/l	Quarterly	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
020	Excess Quarry Water	Unnamed Trib 1 to Coeymans Creek	@	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pН	6.0	9.0	SU	Quarterly	Grab	

PARAMETER		UENT LIMIT or CULATED LEVEL		LDWEG	GANGE F	GANGN E	TD.	
	Monthly Average	Daily Maximum	ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
Flow	Monitor	Monitor			MGD	Quarterly	Instantaneous	
Solids, Total Suspended	25	45			mg/l	Quarterly	Grab	
Solids, Settleable	Monitor	0.1			ml/l	Quarterly	Grab	
Oil & Grease	Monitor	15			mg/l	Quarterly	Grab	

[@] - Discharge authorization and monitoring requirement is effective from the date when the plant modernization begins.

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
021, 025 024	Storm water from cement manufacturing area Storm water – Material Storage Pile Area	Unnamed Trib 1 to Coeymans Creek	@@	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pН	6.0	9.0	SU	Monthly	Grab	

PARAMETER	EFFLUEN' Monthly Average Daily Avg.	Γ LIMIT Daily Maximum	ACTIONLEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
Flow	Monitor	Monitor		GPD	Monthly	Instantaneous	
Solids, Total Suspended	25	45		mg/l	Monthly	Grab	
Solids, Total Suspended	Monitor	50		mg/l	Monthly	Grab	##
Solids, Settleable	Monitor	0.1		ml/l	Monthly	Grab	
Solids, Total Dissolved	Monitor	Monitor		mg/l	Monthly	Grab	
Oil & Grease	Monitor	15		mg/l	Monthly	Grab	

^{@@} - Discharge authorization and monitoring requirement for outfalls 021, 024 and 025 begin when the plant modernization is complete or in July 2016 whichever is earlier.

^{## -} Applicable to Outfall 024 only (according to 40 CFR Part 411 Cement Manufacturing Point Source Category). Outfall 024 is monitored for other parameters similar to Outfalls 021 and 025.

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
25A	Non Contact Cooling Water	Unnamed Trib 1 to Coeymans Creek	EDPM	6/30/2016

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pН	6.5	8.5	SU	Weekly	Grab	

PARAMETER	EFFLUENT CALCULA LEVEL		ACTION LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
	Monthly Average	Daily Maximum					
Flow	Monitor	Monitor		MGD	Weekly	Instantaneous	
Temperature	Monitor	90		Deg F	Weekly	Grab	
Solids, Total Suspended	Monitor	Monitor		mg/l	Weekly	Grab	
Solids, Settleable	Monitor	Monitor		ml/l	Monthly	Grab	
Solids, Total Dissolved	Monitor	Monitor		mg/l	Monthly	Grab	

Note: This outfall is planned to be terminated in June 2016 or when plant modernization is complete, whichever is earlier. Beginning July 2016, Outfall 025 will consist of storm water only.

If applicable, Biological Monitoring will specify additional requirements to protect the usages of Coeymans Creek during the time period of EDPM to June 2016.

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
027	Storm water from quarry's truck unloading station and overland runoff	Unnamed sub-trib. to Hannacroix Creek	EDPM	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pН	6.5	8.5	SU	Monthly	Grab	

PARAMETER	EFFLUENT LIMIT A		ACTIONLE	VEL	UNITS	SAMPLE	SAMPLE	FN
	Monthly Average Daily Avg.	Daily Maximum				FREQUENCY	TYPE	
Flow	Monitor	Monitor			GPD	Monthly	Instantaneous	
Solids, Total Suspended	25	45			mg/l	Monthly	Grab	
Solids, Settleable	Monitor	0.1			ml/l	Monthly	Grab	
Solids, Total Dissolved	Monitor	Monitor			mg/l	Monthly	Grab	
Oil & Grease	Monitor	15			mg/l	Monthly	Grab	
BOD5	Monitor	Monitor			mg/l	Monthly	Grab	\$\$
TRC	Monitor	Monitor			ug/l	Monthly	Grab	\$\$
Ammonia (as NH3)	Monitor	Monitor			mg/l	Monthly	Grab	\$\$
Phosphorous, Total	Monitor	Monitor			mg/l	Monthly	Grab	\$\$

^{\$\$ -} Monitor these parameters only for 12 months from the effective date of this permit and submit the results to the RWE and BWP.

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
23A	Treated Sanitary Wastewater before it mixes with Outfall 23B	Husdon River via Outfall 023	EDPM	ExDP

PARAMETER	MINIMU M	AVERAGE	MAXIMUM	UNIT S	~	SAMPLE TYPE	FOOTNOTES (FN)
рН	6.0	-	9.0	SU	Weekly	Grab	

	EFFLUEN'	T LIMIT	ACTION LEVEL		LIMITS	G 13 FD 7	G + 1 CD + F	
PARAMETER	Monthly Average	Daily Maximum			UNITS	SAMPLE FREQUENC Y	SAMPLE TYPE	FN
Flow	Monitor	Monitor			GPD	Continuous	Recorder	
BOD ₅	30	45			mg/l	Weekly	Grab	
Solids, Total Suspended	30	45			mg/l	Weekly	Grab	
Solids, Settleable	Monitor	0.1			ml/l	Weekly	Grab	
Ammonia, as N	Monitor	20			mg/l	Weekly	Grab	
Coliform, Fecal	200	400			#/100 ml	Weekly	Grab	
Chlorine, Total Residual	Monitor	2000			ug/l	Daily	Grab	

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
23B	CKD Leachate before it mixes with Outfall 23A	Husdon River via Outfall 023	EDPM	ExDP

PARAMETER	MINIMUM	AVERAGE	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
рН	6.0	-	9.0	SU	Weekly	Grab	

21211	EFFLUENT	LIMIT	ACTION LEVEL			a	a	
PARAMETER	Monthly Average.	Daily Maximum	ACTION	LEVEL	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
Flow	Monitor	Monitor			GPD	Continuous	Recorder	
Solids, Total Dissolved	Monitor	Monitor			mg/l	Monthly	Grab	
Solids, Total Suspended	Monitor	20			mg/l	Weekly	Grab	
Solids, Settleable	Monitor	0.1			ml/l	Weekly	Grab	
Sulfates, Total	Monitor	Monitor			mg/l	Monthly	Grab	
Aluminum, Total	2000	4000			ug/l	Monthly	Grab	
Mercury, Total	Monitor	50			ng/l	Quarterly	Grab	2

OUTFALL No.	WASTEWATER TYPE	RECEIVING WATER	EFFECTIVE	EXPIRING
023	CKD Leachate and sanitary wastewater	Hudson River	EDPM	ExDP

PARAMETER	MINIMUM	MAXIMUM	UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FOOTNOTES (FN)
pН	6.0	9.0	SU	Weekly	Grab	
DO	2.0	Monitor	mg/l	Weekly	Grab	-

DADAN GETER	EFFLUENT LIMIT		A GENERAL EL FILIE				a	EN I
PARAMETER	Monthly Average	Daily Maximum	ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
Flow	Monitor	Monitor			GPD	Continuous	Recorder	
Solids, Total Suspended	Monitor	20			mg/l	Monthly	Grab	
Solids, Total Dissolved	Monitor	32,000			mg/l	Weekly	Grab	
Aluminum, Total	2000	4000			ug/l	Monthly	Grab	
Molybdenum, Total	Monitor	Monitor			ug/l	Monthly	Grab	

D. D. I. (1997)	EFFLUENT LIMIT		A GENERAL ELVEY			a	a 11 m =	
PARAMETER	Monthly Average	Daily Maximum	ACTION LEVEL		UNITS	SAMPLE FREQUENCY	SAMPLE TYPE	FN
Chorine , Total Residual	Monitor	450			ug/l	Weekly	Grab	
WET – Acute Invertebrate			15		TUa	See FN	See FN	1
WET – Acute Vertebrate			15		TUa	See FN	See FN	1
WET – Chronic Invertebrate			90		TUc	See FN	See FN	1
WET – Chronic Vertebrate			90		TUc	See FN	See FN	1

FOOTNOTES

1 - Whole Effluent Toxicity (WET) Testing:

Testing Requirements - WET testing shall consist of Acute and if necessary Chronic. WET testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the Department. The test species shall be *Ceriodaphnia dubia* (water flea - invertebrate) and *Pimephales promelas* (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24 hr composite samples with one renewal for Acute tests and three 24 hr composite samples with two renewals for Chronic tests). The appropriate dilution series bracketing the IWC and including one exposure group of 100% effluent should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test is required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) at outfall 003 is **0.28:1** for Acute, and **0.56:1** for Chronic. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) at outfall 023 is **50:1** for Acute, and **90:1** for Chronic.

<u>Monitoring Period</u> - WET testing at outfall 003 shall be performed **Quarterly** beginning in January and lasting for a period of one full year, every five years, commencing with January 2011. WET testing at outfall 023 shall be performed **Quarterly** beginning in January and lasting for a period of one full year, every five years, commencing with the first January following the EDPM.

Reporting - Toxicity Units shall be calculated and reported on the DMR as follows: $TUa = (100)/(48 \text{ hr LC}_{50})$ or $(100)/(48 \text{ hr EC}_{50})$ (note that Acute data is generated by both Acute and Chronic testing) and TUc = (100)/(NOEC) when Chronic testing has been performed or $TUc = (TUa) \times (10)$ when only Acute testing has been performed and is used to predict Chronic test results, where the 48 hr LC_{50} or 48 hr EC_{50} and NOEC are expressed in % effluent. This must be done for both species and using the Most Sensitive Endpoint (MSE) or the lowest NOEC and corresponding highest TUc. Report a TUa of 0.3 if there is no statistically significant toxicity in 100% effluent compared to control.

The complete test report including all corresponding results, statistical analyses, reference toxicity data, daily average flow at the time of sampling and other appropriate supporting documentation, shall be submitted within 60 days following the end of each test period to the Toxicity Testing Unit. A summary page of the test results for the invertebrate and vertebrate species indicating TUa, 48 hr LC_{50} or 48 hr EC_{50} for Acute tests and/or TUc, NOEC, IC_{25} , and most sensitive endpoints for Chronic tests, should also be included at the beginning of the test report.

<u>WET Testing Action Level Exceedances</u> - If an action level is exceeded then the Department may require the permittee to conduct additional WET testing including Acute and/or Chronic tests. Additionally, the permittee may be required to perform a Toxicity Reduction Evaluation (TRE) in accordance with Department guidance. If such additional testing or performance of a TRE is necessary, the permittee shall be notified in writing by the Regional Water Engineer. The written notification shall include the reason(s) why such testing or a TRE is required.

- 2. Use EPA Method 1631.
- 3. Applicable after Plant Modernization is complete and Quarry Water is no longer a constituent of the Outfall.
- 4. Monitor Flow and TDS monthly upstream of Outfalls 006 and 007 in Coeymans Creek from April 2015 to October 2015 to ascertain compliance with WQS.

MERCURY MINIMIZATION PROGRAM

- 1. <u>General</u> The permittee shall develop, implement, and maintain a Mercury Minimization Program (MMP) for those outfalls which have mercury effluent limits. The MMP is required because the 50 ng/L permit limit exceeds the statewide water quality based effluent limit (WQBEL) of 0.70 nanograms/liter (ng/L) for Total Mercury. The goal of the MMP is to reduce mercury effluent levels in pursuit of the WQBEL.
- 2. <u>MMP Elements</u> The MMP shall be documented in narrative form and shall include any necessary drawings or maps. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. As a minimum, the MMP shall include an on-going program consisting of: periodic monitoring; an acceptable control strategy which will become enforceable under this permit; and, submission of periodic status reports.
- A. <u>Monitoring</u> The permittee shall conduct periodic monitoring designed to quantify and, over time, track the reduction of mercury. Wastewater treatment plant influents and effluents, and other outfalls shall be monitored in accordance with the minimum frequency specified on the mercury permit limits page. Additionally, key locations in the wastewater and/or storm water collection systems, and known or potential mercury sources, including raw materials, shall be monitored at the above frequency during the first year of the MMP. Monitoring of key locations and known/potential sources may be reduced during subsequent years if downstream outfalls have maintained Mercury levels less than 50 ng/l during the previous year. Additional monitoring must be completed as may be required elsewhere in this permit or upon Department request. Monitoring shall be coordinated so that the results can be effectively compared between internal locations and final outfalls.

All permit-related wastewater and storm water mercury compliance point (outfall) monitoring shall be performed using EPA Method 1631. Use of EPA Method 1669 during sample collection is recommended. Unless otherwise specified, all samples should be grabs. Monitoring at influent and other locations tributary to compliance points may be performed using either EPA Methods 1631 or 245.7. Monitoring of raw materials, equipment, treatment residuals, and other non-wastewater/non-storm water substances may be performed using other methods as appropriate.

- B. <u>Control Strategy</u> An acceptable control strategy is required for reducing mercury discharges via cost-effective measures, which may include, but is not limited to, source identification, more stringent control of tributary waste streams, remediation, and/or installation of new or improved treatment facilities. Required monitoring shall also be used, and supplemented if appropriate, to determine the most effective way to operate the wastewater treatment system(s) to ensure effective removal of mercury while maintaining compliance with other permit requirements.
- C. <u>Annual Status Report</u> An annual status report shall be submitted to the Regional Water Engineer and to the Bureau of Water Permits summarizing: (a) all MMP monitoring results for the previous year; (b) a list of known and potential mercury sources; (c) all action undertaken pursuant to the strategy during the previous year; (d) actions planned for the upcoming year, and (e) progress toward the goal. The first annual status report is due October 1, 2011 and follow-up status reports are due annually thereafter. A file shall be maintained containing all MMP documentation which shall be available for review by DEC representatives. Copies shall be provided upon request.
- 3. <u>MMP Modification</u> The MMP shall be modified whenever: (a)changes at the facility or within the collection system increase the potential for mercury discharges; (b) actual discharges exceed 50 ng/L; (c) a letter from the Department identifies inadequacies in the MMP; or (d) pursuant to a permit modification.

BIOLOGICAL MONITORING REQUIREMENTS

All submissions under this section should provide, unless otherwise noted:

- Two (2) hard copies and one (1) digital copy to the Steam Electric Unit Leader;
- One (1) copy of the cover letter to the Division of Water, SPDES Compliance Information Section; and
- One (1) copy of the cover letter to the Regional Water Engineer

Implementation of Best Technology Available

- 1. By July 1, 2016 the permittee must install and operate the following technologies and implement the following operational measures to meet the Best Technology Available requirements of 6 NYCRR Parts 704.1 and 704.5 and the performance goals of CP-#52 for the modernized Lafarge facility:
 - a) A closed-cycle glycol cooling system for cement manufacturing facility;
 - b) A closed-cycle cooling system for the co-generation facility;
 - c) Installation and operation of 0.5 mm cylindrical wedgewire screens with a maximum through slot velocity of 0.5 fps at the current cooling water intake structure;
 - d) Use alternative primary sources of water (quarry water, storm water and well water) to meet cooling needs of the facility; and
 - e) Limit the use of Hudson River water for cooling and process purposes to 2 MGD, and only when the primary sources are inadequate to meet the cooling and process needs of the facility.

Technology Installation and Operation Plan

- 2. Within 15 months of the effective date of the permit modification (EDPM + 15 months) requiring technologies and operational measures in Biological Monitoring Requirement 1 to meet the standards in 6 NYCRR Part 704.5 and § 316(b) of the Clean Water Act, the permittee must submit an approvable *Technology Installation and Operation Plan*. This plan must include, but is not limited to, the following:
 - a) A schedule for the installation and operation of the closed-cycle glycol cooling system for cement manufacturing;
 - b) A schedule for the installation and operation of the closed-cycle cooling system for the co-generation facility;
 - c) A schedule for the installation and operation of 0.5 mm cylindrical wedgewire screens;
 - d) Approvable, preliminary plans, drawings, descriptions and operating procedures for the technologies identified in Requirement 1; and
 - e) A schedule to implement the operational measures in Requirement 1(d) and (e).

Upon receipt of Department approval, the permittee must implement the *Technology Installation and Operation Plan* in accordance with the approved schedule. The *Technology Installation and Operation Plan* and approved schedule will become an enforceable condition of this SPDES permit.

Verification Monitoring Reporting

3. By February 1, and every year thereafter, the permittee must submit an *Annual Water Use Summary* report. This report shall contain monthly totals of Hudson River water used for the previous year.

Additional Reporting Requirements

4. The permittee must maintain records of all data, reports and analysis pertaining to compliance with 6NYCRR Part 704 and Section 316(b) CWA for a period no less than 10 years from EDP.

5. The permittee must submit status reports at EDP + 4.5 years. At a minimum, this status report must include a description of the operational status of the facility during the preceding 4.5 years and compliance with Biological Requirements 1 and 2 of this permit.

General Requirement

6. Modification of the facility cooling water intake must not occur without prior Department approval. The permittee must submit written notification, including detailed descriptions and plans, to the NYS DEC Steam Electric Unit; the Director of the Bureau of Water Compliance Program; and both the Regional Permit Administrator and the Regional Water Engineer, Region 4, at least 60 days prior to any proposed change which would result in the alteration of the permitted operation, location, design, construction or capacity of the cooling water intake structure. The permittee must submit with the written notification a demonstration that the change reflects the best technology available for minimizing adverse environmental impacts pursuant to 6 NYCRR §704.5, the Performance Goals of CP-#52, and Section 316(b) of the Clean Water Act. As determined by NYS DEC, a permit modification application in accordance with 6 NYCRR Part 621 may be required.

SCHEDULE OF COMPLIANCE - BIOLOGICAL MONITORING REQUIREMENTS

The permittee shall comply with the following schedule:

Outfall Number(s)	Compliance Action *	Due Date
NA	BMR 1. Permittee shall implement technologies and operational measures to meet requirements of 6 NYCRR Parts 704.1 and 704.5 and the performance goals of CP-#52	July 1, 2016
	BMR 2. Submit an approvable Technology Installation and Operational Plan	EDPM + 15 months
	BMR 3. Submit annual Water Use Summary Report	February 1, and every year thereafter

^{*} Where applicable, **Compliance Action** numbers coincide with action item numbers found under **Biological Monitoring Requirements.**

SPECIAL CONDITIONS - INDUSTRY BEST MANAGEMENT PRACTICES

1. <u>General</u> - The permittee shall develop, maintain, and implement a Best Management Practices (BMP) plan to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and storm water discharges including, but not limited to, drainage from raw material storage.

The BMP plan shall be documented in narrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. A copy of the current BMP plan shall be submitted to the Department as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized Department representatives upon request.

- 2. <u>Compliance Deadlines</u> An **updated** BMP plan shall be submitted by within six months of the effective date of the permit to the Regional Water Engineer. The BMP plan shall be implemented within 6 months of submission, unless a different time frame is approved by the Department. The BMP plan shall be reviewed annually and shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the Department identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions (with the exception of SWPPPs see item (4.B.) below) must be submitted to the Regional Water Engineer within 30 days. Note that the permittee is not required to obtain Department approval of the BMP plan (or of any SWPPPs) unless notified otherwise. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.
- 3. <u>Facility Review</u> The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases.

The review shall address all substances present at the facility that are identified in Tables 6-10 of SPDES application Form NY-2C (available at http://www.dec.ny.gov/docs/permits_ej_operations_pdf/form2c.pdf) or that are required to be monitored for by the SPDES permit.

4. A. <u>13 Minimum BMPs</u> - Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify BMPs that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of storm water elements of the BMP is available in the September 1992 manual *Storm Water Management for Industrial Activities*, EPA 832-R-92-006 (available from NTIS, 703-487-4650, order # PB 92235969). As a minimum, the plan shall include the following BMPs:

1. BMP Pollution Prevention Team

6. Security

10. Spill Prevention & Response

2. Reporting of BMP Incidents

7. Preventive Maintenance

11. Erosion & Sediment Control

3. Risk Identification & Assessment

8. Good Housekeeping

12. Management of Runoff

4. Employee Training

9. Materials/Waste Handling, Storage, & Compatibility

13. Street Sweeping

5. Inspections and Records

Note that for some facilities, especially those with few employees, some of the above BMPs may not be applicable. It is acceptable in these cases to indicate "Not Applicable" for the portion(s) of the BMP Plan that do not apply to your facility, along with an explanation.

B. Storm Water Pollution Prevention Plans (SWPPPs) Required for Discharges of Storm Water From Construction Activity to Surface Waters - As part of BMP #11, a SWPPP shall be developed prior to the initiation of any site disturbance of one acre or more of uncontaminated area. Uncontaminated area means soils or groundwater which are free of contamination by any toxic or non-conventional pollutants identified in Tables 6-10 of SPDES application Form NY-2C. Disturbance of any size contaminated area(s) and the resulting discharge of contaminated storm water is not authorized by this permit unless the discharge is under State or Federal oversight as part of a remedial program or after review by the Regional Water Engineer; nor is such discharge authorized by any SPDES general permit for storm water discharges. SWPPPs are not required for discharges of storm water from construction activity to ground waters.

The SWPPP shall conform to the *New York Standards and Specifications for Erosion and Sediment Control* and *New York State Storm Water Management Design Manual*, unless a variance has been obtained from the Regional Water Engineer, and to any local requirements. The permittee shall submit a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction activity **at least 30 days prior to soil disturbance**. The SWPPP shall also be submitted to the Regional Water Engineer if contamination, as defined above, is involved and the permittee must obtain a determination of any SPDES permit modifications and/or additional treatment which may be required prior to soil disturbance. Otherwise, the SWPPP shall be submitted to the Department only upon request. When a SWPPP is required, a properly completed *Notice of Intent* (NOI) form shall be submitted (available at www.dec.ny.gov/chemical/43133.html) prior to soil disturbance. Note that submission of a NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for storm water discharges, nor are any additional permit fees incurred. SWPPPs must be developed and submitted for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP are properly implemented.

5. Required Sampling For "Hot Spot" Identification - Development of the BMP plan shall include sampling of waste stream segments for the purpose of pollutant "hot spot" identification. The economic achievability of effluent limits will not be considered until plant site "hot spot" sources have been identified, contained, removed or minimized through the imposition of site specific BMPs or application of internal facility treatment technology. For the purposes of this permit condition a "hot spot" is a segment of an industrial facility (including but not limited to soil, equipment, material storage areas, sewer lines etc.) which contributes elevated levels of problem pollutants to the wastewater and/or storm water collection system of that facility.

For the purposes of this definition, problem pollutants are substances for which treatment to meet a water quality or technology requirement may, considering the results of waste stream segment sampling, be deemed unreasonable. For the purposes of this definition, an elevated level is a concentration or mass loading of the pollutant in question which is sufficiently higher than the concentration of that same pollutant at the compliance monitoring location so as to allow for an economically justifiable removal and/or isolation of the segment and/or B.A.T. treatment of wastewaters emanating from the segment.

- 6. <u>Facilities with Petroleum and/or Chemical Bulk Storage (PBS and CBS) Areas</u> Compliance must be maintained with all applicable regulations including those involving releases, registration, handling and storage (6NYCRR 595-599 and 612-614). Storm water discharges from handling and storage areas should be eliminated where practical.
- A. <u>Spill Cleanup</u> All spilled or leaked substances must be removed from secondary containment systems as soon as practical and for CBS storage areas within 24 hours, unless written authorization is received from the Department. The containment system must be thoroughly cleaned to remove any residual contamination which could cause contamination of storm water and the resulting discharge of pollutants to waters of the State. Following spill cleanup the affected area must be completely flushed with clean water three times and the water removed after each flushing for proper disposal in an on-site or off-site wastewater treatment plant designed to treat such water and permitted to discharge such wastewater. Alternately, the permittee may test the first batch of storm water following the spill cleanup to determine discharge acceptability. If the water contains no pollutants it may be discharged. Otherwise it must be disposed of as noted above. See *Discharge Monitoring* below for the list of parameters to be sampled for.
- B. <u>Discharge Operation</u> Storm water must be removed before it compromises the required containment system capacity. Each discharge may only proceed with the prior approval of the permittee staff person responsible for ensuring SPDES permit compliance. Bulk storage secondary containment drainage systems must be locked in a closed position except when the operator is in the process of draining accumulated storm water. Transfer area secondary containment drainage systems must be locked in a closed position during all transfers and must not be reopened unless the transfer area is clean of contaminants. Storm water discharges from secondary containment systems should be avoided during periods of precipitation. A logbook shall be maintained on site noting the date, time and personnel supervising each discharge.
- C. <u>Discharge Screening</u> Prior to each discharge from a secondary containment system the storm water must be screened for contamination*. All storm water must be inspected for visible evidence of contamination. Additional screening methods shall be developed by the permittee as part of the overall BMP Plan, e.g. the use of volatile gas meters to detect the presence of gross levels of gasoline or volatile organic compounds. If the screening indicates contamination, the permittee must collect and analyze a

representative sample** of the storm water. If the water contains no pollutants it may be discharged. Otherwise it must either be disposed of in an on site or off site wastewater treatment plant designed to treat and permitted to discharge such wastewater or the Regional Water Engineer can be contacted to determine if it may be discharged without treatment.

- D. <u>Discharge Monitoring</u> Unless the discharge from any bulk storage containment system outlet is identified in the SPDES permit as an outfall with explicit effluent and monitoring requirements, the permittee shall monitor the outlet as follows:
- (i) Bulk Storage Secondary Containment Systems:
- (a) The volume of each discharge from each outlet must be monitored. Discharge volume may be calculated by measuring the depth of water within the containment area times the wetted area converted to gallons or by other suitable methods. A representative sample shall be collected of the first discharge* following any cleaned up spill or leak. The sample must be analyzed for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present.**
- (b) Every fourth discharge* from each outlet must be sampled for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present.**
- (ii) Transfer Area Secondary Containment Systems:

The first discharge* following any spill or leak must be sampled for flow, pH, the substance(s) transferred in that area and any other pollutants the permittee knows or has reason to believe are present.**

- E. <u>Discharge Reporting</u> Any results of monitoring required above, excluding screening data, must be submitted to the Department by appending them to the corresponding DMR. Failure to perform the required discharge monitoring and reporting shall constitute a violation of the terms of the SPDES permit.
- F. <u>Prohibited Discharges</u> In all cases, any discharge which contains a visible sheen, foam, or odor, or may cause or contribute to a violation of water quality is prohibited. The following discharges are prohibited unless specifically authorized elsewhere in this SPDES permit: spills or leaks, tank bottoms, maintenance wastewaters, wash waters where detergents or other chemicals have been used, tank hydrotest and ballast waters, contained fire fighting runoff, fire training water contaminated by contact with pollutants or containing foam or fire retardant additives, and unnecessary discharges of water or wastewater into secondary containment systems.
- * Discharge includes storm water discharges and snow and ice removal. If applicable, a representative sample of snow and/or ice should be collected and allowed to melt prior to assessment.
- ** If the stored substance is gasoline or aviation fuel then sample for Oil & Grease, Benzene, Ethylbenzene, Naphthalene, Toluene, and Total Xylenes (EPA Method 602). If the stored substance is kerosene, diesel fuel, fuel oil, or lubricating oil then sample for Oil & Grease and Polynuclear Aromatic Hydrocarbons (EPA Method 610). If the substance(s) are listed in Tables 6-8 of SPDES application form NY-2C, then sampling is required. If the substance(s) are listed in NY-2C Tables 9-10, sampling for appropriate indicator parameters may be required, e.g. BOD₅ or Toxicity Testing. Contact the facility inspector for further guidance. In all cases Flow and pH monitoring are required.

DISCHARGE NOTIFICATION REQUIREMENTS

- a) Except as provided in (c) of these Discharge Notification Act requirements, the permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit. Such signs shall be installed within 90 days of the Effective Date Permit.
- b) Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such permit modification or renewal.
- c) The Discharge Notification Requirements described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or discharges to ground water.
- d) The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

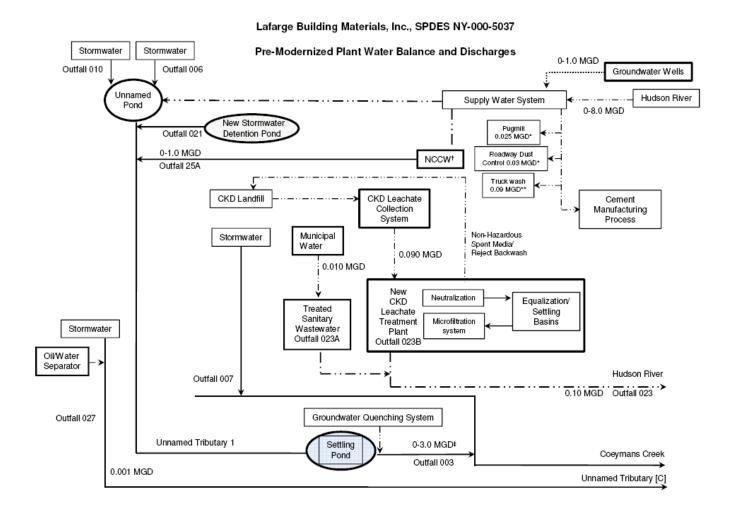
The signs shall have **minimum** dimensions of eighteen inches by twenty four inches (18" x 24") and shall have white letters on a green background and contain the following information:

N.Y.S. PERMITTED DISCHARGE POINT	
SPDES PERMIT No.: NY	
OUTFALL No. :	
For information about this permitted discharge contact:	
Permittee Name:	
Permittee Contact:	
Permittee Phone: () - ### - ####	
OR:	
NYSDEC Division of Water Regional Office Address :	
NYSDEC Division of Water Regional Phone: () - ### -####	

- e) For each discharge required to have a sign in accordance with a), the permittee shall, concurrent with the installation of the sign, provide a repository of copies of the Discharge Monitoring Reports (DMRs), as required by the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of this permit. This repository shall be open to the public, at a minimum, during normal daytime business hours. The repository may be at the business office repository of the permittee or at an off-premises location of its choice (such location shall be the village, town, city or county clerk's office, the local library or other location as approved by the Department). In accordance with the **RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS** page of your permit, each DMR shall be maintained on record for a period of five years.
- f) The permittee shall periodically inspect the outfall identification signs in order to ensure that they are maintained, are still visible and contain information that is current and factually correct.

FLOW DIAGRAM AND MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below:



Outfalls 008 and 012 to 019 are not shown on this diagram

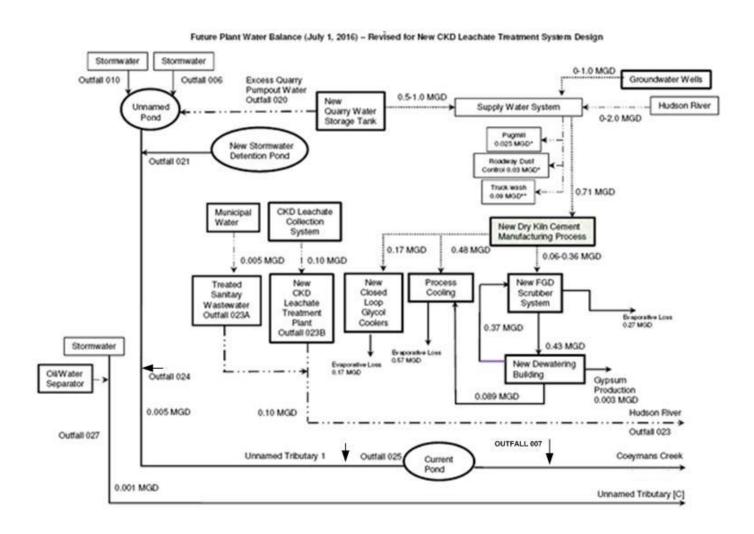
Non-Contact Cooling Water (NCCW) will be eliminated when the plant modernization is completed and will be replaced with closed cycle cooling.

Outfalls 004, 005, and 011 are deleted.

FLOW DIAGRAM AND MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the location(s) specified below:

Effecive after the plant modernization is completed.



After the plant modernization is completed, outfall 003 changes to storm water and excess Quarry Pumpout Water (Outfall 020).

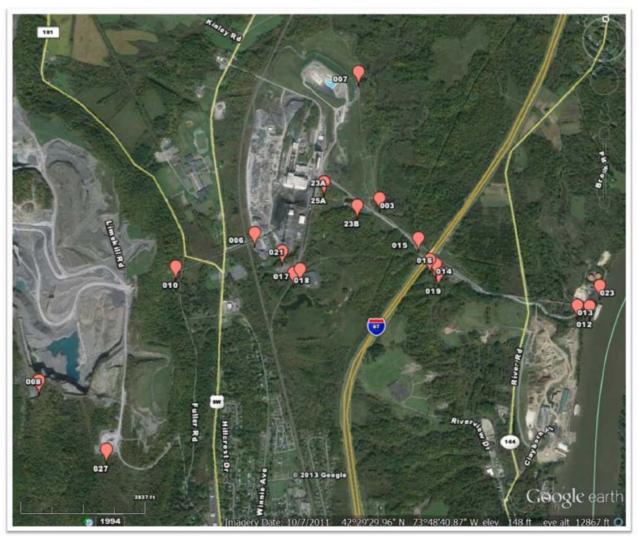


Figure 1 Map Showing All Outfall Locations SPDES Permit NY-000-5037

Outfalls 021, 024, and 025 become active in July 2016.

GENERAL REQUIREMENTS

A. The regulations in 6 NYCRR Part 750 are hereby incorporated by reference and the conditions are enforceable requirements under this permit. The permittee shall comply with all requirements set forth in this permit and with all the applicable requirements of 6 NYCRR Part 750 incorporated into this permit by reference, including but not limited to the regulations in paragraphs B through I as follows:.

B. General Conditions

Duty to comply

6NYCRR Part 750-2.1(e) & 2.4

Duty to reapply

6NYCRR Part 750-1.16(a)

6NYCRR Part 750-2.1(g)

6NYCRR Part 750-2.1(g)

6NYCRR Part 750-2.7(f)

Permit actions 6NYCRR Part 750-1.1(c), 1.18, 1.20 & 2.1(h)

Property rights 6NYCRR Part 750-2.2(b)
Duty to provide information 6NYCRR Part 750-2.1(i)

Inspection and entry 6NYCRR Part 750-2.1(a) & 2.3

C. Operation and Maintenance

Proper Operation & Maintenance 6NYCRR Part 750-2.8

Bypass 6NYCRR Part 750-1.2(a)(17), 2.8(b) & 2.7 Upset 6NYCRR Part 750-1.2(a)(94) & 2.8(c)

D. Monitoring and Records

Monitoring and records 6NYCRR Part 750-2.5(a)(2), 2.5(c)(1), 2.5(c)(2), 2.5(d) & 2.5(a)(6)

Signatory requirements 6NYCRR Part 750-1.8 & 2.5(b)

E. Reporting Requirements

Reporting requirements 6NYCRR Part 750-2.5, 2.6, 2.7 & 1.17

Anticipated noncompliance 6NYCRR Part 750-2.7(a) Transfers 6NYCRR Part 750-1.17 Monitoring reports 6NYCRR Part 750-2.5(e) Compliance schedules 6NYCRR Part 750-1.14(d) 24-hour reporting 6NYCRR Part 750-2.7(c) & (d) Other noncompliance 6NYCRR Part 750-2.7(e) Other information 6NYCRR Part 750-2.1(f) Additional conditions applicable to a POTW 6NYCRR Part 750-2.9 Special reporting requirements for discharges 6NYCRR Part 750-2.6

that are not POTWs

F. Planned Changes

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

The alteration or addition to the permitted facility may meet of the criteria for determining whether facility is a new source in 40 CFR §122.29(b); or

The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, or to notification requirements under 40 CFR §122.42(a)(1); or

The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

In addition to the Department, the permittee shall submit a copy of this notice to the United States Environmental Protection Agency at the following address: U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866.

G. Notification Requirement for POTWs

All POTWs shall provide adequate notice to the Department and the USEPA of the following:

Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; or

Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.

For the purposes of this paragraph, adequate notice shall include information on:

the quality and quantity of effluent introduced into the POTW, and

any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

POTWs shall submit a copy of this notice to the United States Environmental Protection Agency, at the following address: U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866.

H. Sludge Management

The permittee shall comply with all applicable requirements of 6 NYCRR Part 360.

I. SPDES Permit Program Fee

The permittee shall pay to the Department an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the Department, and shall comply with all applicable requirements of ECL 72-0602 and 6 NYCRR Parts 480, 481 and 485. Note that if there is inconsistency between the fees specified in ECL 72-0602 and 6 NYCRR Part 485, the ECL 72-0602 fees govern.

J. Water Treatment Chemicals (WTCs)

New or increased use and discharge of a WTC requires prior Department review and authorization. At a minimum, the permittee must notify the Department in writing of its intent to change WTC use by submitting a completed WTC Notification Form for each proposed WTC. The Department will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. The majority of WTC authorizations do not require SPDES permit modification. In any event, use and discharge of a WTC shall not proceed without prior authorization from the Department. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized in writing by the Department. The permittee shall maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure that excessive levels of WTCs are not used.

The permittee shall **submit a completed** *WTC Annual Report Form* each year that they use and discharge WTCs. This form shall be attached to either the December DMR or the annual monitoring report required below.

The WTC Notification Form and WTC Annual Report Form are available from the Department's website at http://www.dec.ny.gov/permits/93245.html .

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

The monitoring information required by this permit shall be summarized, signed and retained for a period of at

least five years from the date of the sampling for subsequent monitoring information required by this permit shall be s					
the locations specified below. Blank forms are available	t (DMR) forms for each <u>One</u> month reporting period to lable at the Department's Albany office listed below. The this permit and the reports will be due no later than the 28th g period.				
(if box is checked) an annual report to the Regional Water Engineer at the address specified below. The annual report is due by February 1 each year and must summarize information for January to December of the previous year in a format acceptable to the Department.					
(if box is checked) a monthly "Wastewater Facility County Heat and/or County Heat below	Operation Report" (form 92-15-7) to the: alth Department or Environmental Control Agency specified				
Send the <u>original</u> (top sheet) of each DMR page to: Department of Environmental Conservation Division of Water, Bureau of Water Compliance 625 Broadway, Albany, New York 12233-3506 Phone: (518) 402-8177	Send the first <u>copy</u> (second sheet) of each DMR page to: Department of Environmental Conservation Regional Water Engineer, Region 4 1130 North Westcott Road Schenectady, NY 12306-2014				
	Phone: (518) 357-2045				

- B. Monitoring and analysis shall be conducted according to test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- C. More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.
- D. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- E. Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.
- F. Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.